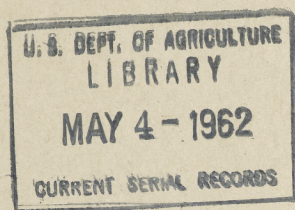


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UNIVERSITY OF MARYLAND
AGRICULTURAL EXPERIMENT STATION



**Adaptation And Performance Of
Soybean Varieties In Maryland, 1951-1960**

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Adaptation And Performance Of Soybean Varieties In Maryland, 1951-1960

Soybean production has been expanding steadily in Maryland since 1940. (Acreages of soybeans for beans and average yields for the State from 1924 through 1960 are presented in figure 1).

The data suggest an increase in average yields, beginning about 1948. Such an increase probably can be attributed to improved cultural practices and use of new, improved varieties of soybeans. But it is impossible to separate the effects of these two agronomic phases of soybean production, cultural

and varietal, as each is dependent upon the other for maximum expression.

The cooperative breeding program in soybeans, initiated in 1936 by the United States Department of Agriculture and State Experiment Stations, has been an especially fruitful one. Twenty-four varieties have been released as a result of this program—eight within the past 3 years. This report summarizes the results of the Cooperative Uniform Soybean Tests and other soybean variety tests conducted in Maryland since 1951.

MATERIALS AND METHODS

Cooperative Uniform Soybean Tests include the most promising of new strains originating at soybean breeding stations in the United States and selected, improved varieties already in commercial production. Certain of the latter varieties are maintained in the tests as long-time check varieties. Maturity Groups III, IV, V, and VI include strains of interest to Maryland. Groups III and IV are ideally adapted to the Piedmont and northern parts of Maryland; Groups V and VI are best adapted to the southern Coastal Plains of the State. Descriptions of varieties adapted to Maryland are presented in table 1.

Each Uniform Group Test usually included 12 strains, but the number has varied. Groups III and IV were tested in single-row plots, with four replications. Groups IVS, V, and VI

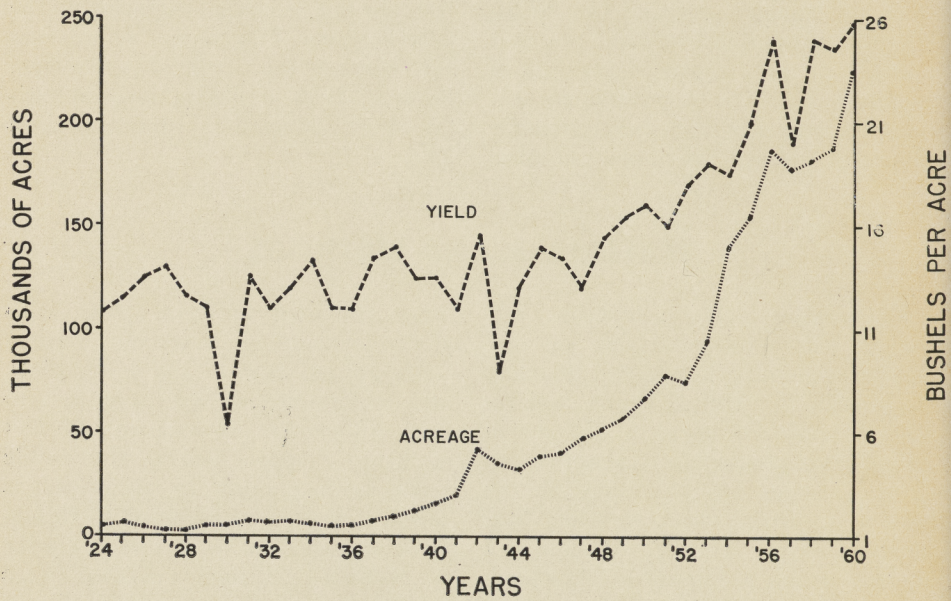
were evaluated in 4-row plots, with three replications. Maryland Variety Tests utilized both 3- and 4-row plots, and replications varied from two to four. All plots in all tests were 20 feet in length. Approximately 200 viable seeds were planted in each 20-foot row. All plots were trimmed to 18 feet at emergence, and to 16 feet just prior to harvest. All data collected were based on the plants or seed yields of the 16-foot, single-row plot or on the center 1 or 2 rows of 3- or 4-row plots, respectively.

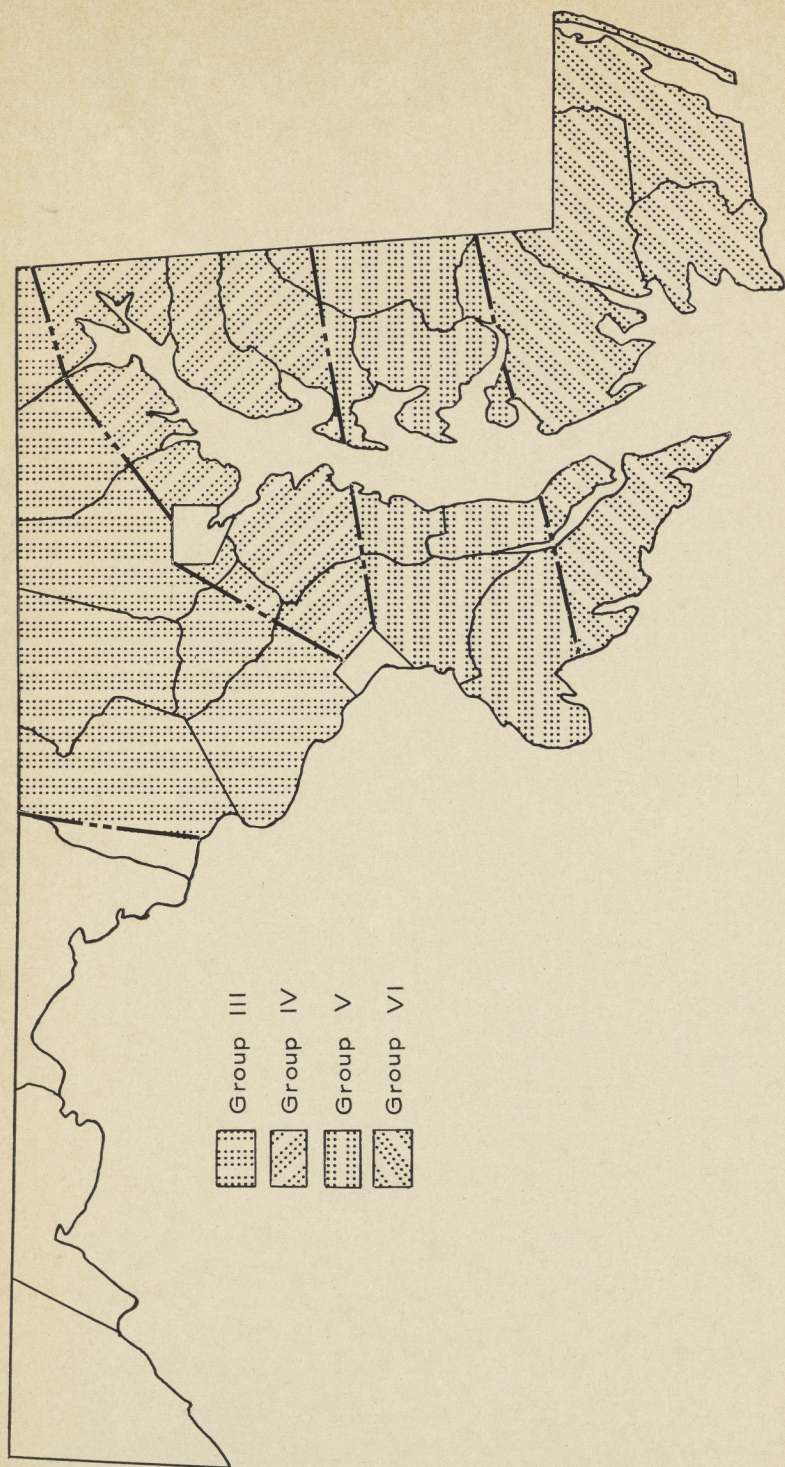
Plots were evaluated for agronomic and chemical characters, as follows:

Yield of seed was obtained by weighing threshed air-dried beans and expressed in bushels per acre.

Maturity was recorded as the number of days subsequent to August 31 until the leaves had dropped and 95%

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of the pods were ripe. Maturity is most often expressed as the number of days earlier (—) or later (+) than the check variety of a given test.

Height was the average length (in inches) of plants from the ground to the tips of the stems at time of maturity.

Lodging of plants was rated on a 1 to 5 scale, with 1 as almost all plants erect, and 5 as all plants severely lodged.

Oil and protein contents of seed were expressed in percent on a moisture-free basis. All chemical analyses were made by the U.S. Regional Soybean Laboratory, Urbana, Illinois.

Seed size was determined from two samples of 100 seeds each per plot and expressed as grams per 100 seeds.

Seed quality was rated on a 1 to 5 scale, with 1 as best quality. Factors considered in estimating seed quality were development of seed, wrinkling,

cracking of seed coat, and damage.

Purple stain of seed, (*Cercospora kikuchii*), was recorded as the percentage of visibly infected seeds of a 200 seed sample.

All variety tests were conducted as randomized complete blocks and were analyzed statistically for seed yields. Varietal mean yields are sometimes presented for different intervals of time, to allow direct comparisons of certain varieties. For characteristics other than yield, it was sometimes most convenient to adjust the performance of a variety evaluated for a short period of time to the long-time mean of one or more check varieties by the same difference observed between the variety and the check for the shorter period of evaluation in which the two were directly comparable. Data are presented only for those strains that have been released by public or private agencies.

EXPERIMENTAL RESULTS AND DISCUSSION

Group III

Agronomic and chemical performances of Group III soybean varieties evaluated at Beltsville, 1952-57, are presented in tables 2 and 3. Clark, a variety of Group IV maturity and the latest maturing of these varieties, has been superior to all others in seed yield, lodging resistance, and seed quality. Performances of Shelby, Lincoln, and Ford have been similar; Shelby has exhibited a slight superiority for seed quality among these three varieties.

Group IV

A summary of Group IV tests at Beltsville, 1951 to 1957, is presented in tables 4 and 5. The latest strain of the group, Kent, gave the best performance for yield, quality, and oil content of seed. Lodging resistance of Kent was exceptionally good. Chief differed from

other varieties by plant height, lodging susceptibility, low oil content of seed, and small seed size. The major differences among Perry, Clark, and Wabash were in plant maturity, seed yield, and lodging resistance. Both Perry and Clark were superior to Wabash in seed yield and lodging resistance.

Group IVS

Results of Uniform Group IVS tests conducted at various locations in the State are presented in tables 6 and 7. Yield differences among varieties were not consistent in all environments, but yields of Wabash usually were below those of Kent, Perry, or Clark. Seed yields of Kent exceeded those of either Perry or Clark, when averaged over the entire period of 1952 to 1960. Kent exhibited seed of excellent quality for a variety of Group IV maturity. Scott

was low in both oil and protein content of seed and was susceptible to root rots in several seasons. Bethel is recommended by the Maryland Agricultural Experiment Station only because of its resistance to root-knot nematode.

Group V

Summaries of the Group V Tests at various locations in the State for the period 1952 to 1960 are presented in tables 8 and 9. During earlier years of testing, Dorchsoy 67 was superior in yield but exhibited some shattering of seed. During later years of testing, yields of Dorman and Hill were comparable. Hill's greatest advantage over Dorman or Dorchsoy 67 was its resistance to lodging. S100 was lower in seed quality, and lower in oil, but higher in protein content of seed than any other variety.

Group VI

Agronomic performance of Lee, Hood, and Ogden is presented in tables 10 and 11. Hood was 6 days earlier than Ogden in maturity and compared quite favorably with both Ogden and Lee in seed yield and quality. Best lodging resistance in this group was exhibited by Ogden.

Maryland Soybean Variety Tests

Varieties varying in maturity from very early to very late have been included in the Maryland Soybean Variety Tests and their performances are summarized in tables 12 and 13.

Varieties Hawkeye, Korean, Baven-der Special, Adams, Lincoln, and Chief were too early for the soybean production areas of Maryland and were lower in seed yield and quality than later maturing soybeans.

Mean yields of all varieties evaluated in each of the years 1956 to 1960 exhibited a range of only 4.3 bushels per acre. Kent, Dorman, and Ogden excelled in mean seed yields in their respective maturity groups. Kent and Perry were especially productive at the Kent County location in 1955 and 1956.

Seed quality of varieties Clark, Perry, S100, Kent, and Scott has been comparable for the 1956-60 interval of testing but has been inferior to the seed quality of Wabash and later maturing Group V and VI varieties.

These same later maturing varieties exhibited more lodging than earlier maturing soybeans and a lower percentage of visible infection by the purple stain fungus.

It is evident that the range in maturity between Clark and Lee (approximately 35 days) and the excellent agronomic performance of most varieties within this range are sufficient to meet the needs of soybean producers throughout the soybean producing areas of the State.

RECOMMENDATIONS

Soybean varietal recommendations, presented biennially in University of Maryland Extension Service Fact Sheet 43, have been based upon the results of the variety tests presented herein, upon additional demonstrational plantings of these same varieties, and upon availability of seed supplies. The sug-

gested region of best adaptation of soybean varieties of a given maturity group can only be approximate and is presented as a general guide. At times, the soybean producer may desire an earlier or even later maturing variety than the Maturity Group indicated.

Recommended Soybean Varieties for Maryland:

Group III	Group IV	Group V	Group VI
Clark	Clark	Dorman	Hood
Ford	Wabash	Hill	Lee
Shelby	Kent		Ogden
	Bethel ¹		

¹For root-knot nematode infested fields only

Table 1. Maturity group classification, year of release, originating station, pedigree, and distinguishing characteristics of soybean varieties adapted to Maryland.

	Maturity group, variety, year of release, and originating station	Pedigree	Distinguishing characteristics							
			Growth habit ²	Flower color ³	Pod color	Seed coat color	Pubes- cence color ⁴	Hilum color ⁵	Seed shape	Disease resistance
III	Lincoln (1944-Ill.)	Mandarin × Manchu	I	W	Dark brown	Shiny yellow	T	Black	Round	Frogeye
	Ford (1958-Iowa)	Lincoln × (LXR) ¹	I	W	Dark brown	Shiny yellow	T	Black	Nearly round	Frogeye
	Shelby (1958-Ill.)	Lincoln × (LXR)	I	P	Brown	Dull yellow	T	Black	Nearly round	Frogeye
IV	Wabash (1949-Ind.)	Dunfield × Mansoy	I	W	Light straw	Straw yellow	G	Light brown	Slightly ellipsoidal	Frogeye
	Perry (1952-Ind.)	Patoka × L37-1355	I	P	Dark gray	Straw yellow	G	Imp. black	Moderately ellipsoidal	
	Clark (1953-Ill.)	Lincoln × (LXR)	I	P	Dark brown	Dull yellow	T	Black	Nearly round	Frogeye
	Kent (1961-Ind.)	Lincoln × Ogden	I	P	Dark brown	Yellow	T	Black	Nearly round	Frogeye, races of downy mildew
	Scott (1958-Mo.)	(S100 × CNS) × (LXR)	I	P	Gray	Yellow	G	Imp. black	Ellipsoidal	Pustule, wildfire
	Bethel (1961-Del.)	Perry × F.C. 33243	I	W	Gray	Yellow	G	Yellow	Nearly round	Frogeye, pod & stem blight, root-knot nem- atode
V	Dorman (1952-Miss.)	Dunfield × Arksoy	D	W	Light gray	Yellow	G	Buff	Ellipsoidal, slightly flattened	
	Hill (1959-Miss.)	(Haberlandt × Dunfield) × (S100 × CNS)	D	W	Light brown	Yellow	T	Light brown	Nearly round	Pustule, wild- fire, frogeye, Phytophthora, root-knot nem- atode
	S100 (1948-Mo.)	Selection from Illini	I	W	Gray	Straw yellow	G	Light brown	Ellipsoidal	

Table 1. Maturity group classification, year of release, originating station, pedigree, and distinguishing characteristics of soybean varieties adapted to Maryland. — (Continued)

Maturity group, variety, year of release, and originating station	Distinguishing characteristics								
	Pedigree	Growth habit ²	Flower color ³	Pod color	Seed coat color	Pubes- cence color ⁴	Hilum color ⁵	Seed shape	Disease resistance
Dortchsoy 67 (1952- Robert L. Dortch Seed Farms)	Macoupin X Ogden	D	W	Dark gray	Yellow	G	Light brown	Ellipsoidal, slightly flattened	
VI Ogden (1940-Tenn.)	Tekyo X P.I. 54610	D	P	Dark gray	Green	G	Light brown	Ellipsoidal	Mod. pustule
Lee (1954-Miss.)	S100 X CNS	D	P	Light brown or tan	Yellow	T	Black	Almost round	Pustule, wild- fire, frog-eye, target-spot, purple stain
Hood (1958-Miss.)	Roanoke X (Ogden X CNS)	D	P	Gray	Yellow	G	Buff	Nearly round	Pustule, wild- fire, frog-eye, target-spot

¹ Lincoln X Richland

² D. equals determinant; I. equals indeterminate.

³ W. equals white; P. equals purple.

⁴ T. equals tawney; G. equals gray.

⁵ Imperfect black is described as slate colored with brown outer ring; light brown, brown, buff, black, gray, and yellow hilum colors have been included in the literature describing the above varieties. Some variation in hilum color exists for certain varieties. The above hilum descriptions do not always agree with the specific genotypes involved.

Table 2. Yield performance (bushels per acre) of soybean varieties evaluated in U. S. Regional Soybean Uniform Group III Tests, Beltsville, Md., 1952-57.

Variety	Years of test						
	1952	1953	1954	1955	1956	1957	Mean
Clark	42.3	28.0	41.2	39.0	51.8	48.4	41.8
Ford	36.7	28.4	34.8	31.3	45.0	40.9	36.2
Lincoln ¹	36.4	27.2	33.2	32.6	41.5	42.0	35.5
Shelby	32.2	28.1	32.8	31.8	44.5	43.7	35.5
Dunfield	34.2	25.5	31.8	24.3	39.4	28.3	30.6
MEAN	36.4	27.4	34.8	31.8	44.4	40.7	35.9
L.S.D. _{.05}	4.9	3.0	6.6	1.7	5.1	7.1	
L.S.D. _{.01}	6.5	4.0	9.0	2.3	6.8	9.6	
C.V. (%)	9.5	7.3	13.3	3.6	7.4	11.7	

¹ Check variety.

Table 3. Agronomic and chemical performance of soybean varieties evaluated in U. S. Regional Soybean Uniform Group III Tests, Beltsville, Md., 1952-57.

Variety	Character evaluated and years of evaluation							
	Maturity ¹ 1952-'57	Height 1952-'57	Lodging 1952-'57	Oil 1954-'57	Protein 1954-'57	Seed size 1954-'57	Seed quality 1952-'57	Purple stain 1955-'57
Clark	+ 5	40	1.8	21.4	42.6	19.8	1.9	4
Ford	— 2	38	2.2	21.2	42.8	19.3	2.5	8
Lincoln ²	0	40	2.4	21.6	42.5	17.5	2.5	6
Shelby	0	40	2.3	21.5	42.1	18.9	2.0	8
Dunfield	— 3	38	3.2	21.9	40.9	18.3	2.4	6
MEAN	0	39	2.4	21.5	42.2	18.8	2.3	6

¹ See Page 2 for an explanation of notations used.

² The check variety, Lincoln, matured, on the average, September 26.

Table 4. Yield performance (bushels per acre) of soybean varieties evaluated in U. S. Regional Soybean Uniform Group IV Tests, Beltsville, Md., 1951-57.

Variety	Years of test							
	1951	1952	1953	1954	1955	1956	1957	Mean
Kent	35.4	49.0	41.8	47.2	50.8	48.3	34.0	43.8
Perry	38.2	43.9	40.9	38.4	43.8	40.8	27.7	39.1
Clark	28.1	39.8	42.4	41.0	39.6	38.6	32.6	37.4
Chief	32.0	34.0	44.0	40.0	33.1	38.0	28.0	35.6
<i>Wabash</i> ¹	28.9	30.4	39.5	36.4	33.8	41.5	30.4	34.4
MEAN	32.5	39.4	41.7	40.6	40.2	41.4	30.5	38.1
L.S.D. _{.05}	8.1	5.6	4.0	6.6	5.6	5.2	4.7	
L.S.D. _{.01}	10.9	7.6	5.3	8.8	7.5	6.9	6.3	
C.V. (%)	18.1	10.3	7.2	10.6	8.9	8.9	10.5	

¹ Check variety.

Table 5. Agronomic and chemical performance of soybean varieties evaluated in U. S. Regional Soybean Uniform Group IV Tests, Beltsville, Md., 1951-57.

Character evaluated and years of evaluation										
Variety	Maturity ¹		Height	Lodging	Oil	Protein	Seed size		Seed quality	Purple stain
	1951-'57	1951-'57					1954-'56	1951-'57		
Kent	+ 9	44	2.0	2.0	21.5	40.8	19.1	1.8	4	
Perry	+ 6	43	2.1	2.1	20.9	42.4	18.9	2.1	4	
Clark	— 4	41	2.3	2.3	20.9	42.1	18.1	2.2	6	
Chief	— 3	51	3.5	3.5	20.2	41.6	14.1	2.4	4	
Wabash ²	0	43	2.9	2.9	21.0	41.4	16.1	1.9	4	
MEAN	+ 2	44	2.6	2.6	20.9	41.7	17.3	2.1	4	

¹ See Page 2 for an explanation of notations used.

² The check variety, Wabash, matured, on the average, October 5.

Table 6. Yield performance (bushels per acre) of soybean varieties evaluated in U. S. Regional Soybean Uniform Group IVS Tests, Maryland, 1952-60.

Variety	Years and locations of tests														Means	
	1952		1953		1954		Linkwood									
	Cambridge Loc. 1	Loc. 2	Upper Marl- boro	Trappe	Snow Hill	Upper Marl- boro	Trappe	1955	1956	1957	1958	1959	1960	1952 to '60	1957 to '60	
Kent	33.5	37.2	33.2	36.2	28.9	31.1	26.9	29.3	42.3	38.7	40.2	38.4	46.5	37.0	31.2	41.0
Perry ¹	39.8	35.6	37.8	34.2	26.9	33.0	21.9	34.4	35.3	30.6	39.3	38.2	40.1	35.1	33.6	37.0
Clark	39.2	—	33.1	32.9	31.4	33.9	23.1	31.8	37.2	26.6	42.6	37.0	40.4	35.1	33.0	36.6
Wabash	32.9	31.9	29.0	32.9	26.4	29.2	20.3	27.8	—	—	—	—	—	—	28.7	—
Scott	—	—	—	—	—	—	—	—	—	31.3	41.8	39.0	43.2	—	—	38.8
Bethel	—	—	—	—	—	—	—	—	—	—	—	35.1	38.2	—	—	—
MEAN:	36.4	34.9	33.3	34.0	28.4	31.8	23.0	30.8	38.3	31.8	41.0	38.2	41.7	35.7	31.6	38.4
L.S.D. _{.05}	4.8	5.3	8.4	4.0	5.6	N.S.	N.S.	3.5	3.5	4.4	5.0	3.1	5.1	—	—	—
L.S.D. _{.01}	6.4	7.2	11.2	5.4	7.4	N.S.	N.S.	4.9	4.8	6.0	6.8	4.2	6.9	—	—	—
C.V. (%)	9.5	10.0	18.0	8.6	13.1	14.2	13.4	6.6	6.0	8.2	7.2	4.8	8.0	—	—	—

¹ Check variety.

Table 7. Agronomic and chemical performance of soybean varieties evaluated in U. S. Regional Soybean Uniform Group IVS Tests, Maryland, 1952-60.

Variety	Character evaluated and years of evaluation							
	Maturity ¹ 1952-'60	Height 1952-'60	Lodging 1952-'60	Oil 1957-'60	Protein 1957-'60	Seed size 1952-'60	Seed quality 1952-'60	Purple stain 1957-'60
Kent	+ 2	42	1.9	22.4	40.8	18.6	2.2	6
Perry ²	0	38	2.0	22.0	41.8	18.4	2.8	6
Clark	— 8	38	2.1	22.5	41.0	17.9	2.5	6
Wabash	— 6 ³	40 ³	2.8 ³	—	—	16.2 ³	2.5 ³	—
Scott	+ 5 ³	40 ³	1.9 ³	21.3	38.7	14.9 ³	2.3 ³	4
Bethel	+ 4 ³	43 ³	2.7 ³	21.1 ⁴	42.1 ⁴	16.9 ³	2.5 ³	4 ⁴
MEAN	0	40	2.3	21.9	40.9	17.2	2.5	6

¹ See Page 2 for an explanation of notations used.

² The check variety, Perry, matured, on the average, September 30.

³ Adjusted to the mean of Perry, Clark, and Kent for the 1952-'60 period of evaluation.

⁴ Adjusted to the mean of Perry, Clark, and Kent for the 1957-'60 period of evaluation.

Table 8. Yield performance (bushels per acre) of soybean varieties evaluated in U. S. Regional Soybean Uniform Group V Tests, Maryland, 1952-60.

Variety	Years and locations of tests														Means	
	1952		1953			1954			Linkwood						1952 to '56	1955 to '60
	Cambridge Loc. 1	Loc. 2	Belts- ville	Upper Marl- boro	Trappe	Snow Hill	Upper Marl- boro	Trappe	1955	1956	1957	1958	1959	1960		
<i>Dorman</i> ¹	34.7	28.8	27.0	24.7	27.1	33.2	16.7	22.6	27.4	30.3	37.2	42.6	34.7	44.1	27.4	36.0
Dortchsoy 67	31.3	30.5	27.6	25.6	28.8	38.3	22.7	25.0	33.0	36.6	37.0	—	—	—	30.9	—
S100	30.8	29.8	38.2	31.0	30.7	31.3	22.2	21.5	31.3	24.3	—	—	—	—	28.1	—
Hill	—	—	—	—	—	—	—	—	34.5	33.2	39.0	39.1	36.1	37.0	—	36.5
MEAN	32.3	29.7	30.9	27.1	28.9	34.3	20.5	23.0	31.6	31.1	37.7	40.8	35.4	40.6	28.8	36.2
L.S.D. _{.05}	3.5	5.5	4.3	5.2	4.4	7.8	5.5	N.S.	N.S.	3.7	6.8	6.7	2.9	4.4	—	—
L.S.D. _{.01}	4.8	7.4	5.8	7.1	5.9	10.6	7.5	N.S.	N.S.	5.0	9.2	9.1	4.0	5.9	—	—
C.V. (%)	8.0	13.5	9.4	13.7	9.9	16.8	16.1	9.6	10.2	7.3	10.7	10.7	4.7	6.0	—	—

¹ Check variety.

Table 9. Agronomic and chemical performance of soybean varieties evaluated in U. S. Regional Soybean Uniform Group V Tests, Maryland, 1952-60.

Variety	Maturity ¹	Height	Lodging	Oil	Protein	Seed size	Seed quality	Purple stain
	1952-'56	1952-'56	1952-'56	1954-'56	1954-'56	1952-'56	1952-'56	1952-'56
<i>Dorman</i> ²	0	42	3.2	20.8	38.3	14.1	1.8	5
Dortchsoy 67	+ 3	41	2.8	21.1	38.0	12.8	1.8	0
S100	— 6	46	2.1	19.1	41.8	15.5	2.8	3
Hill	— 3 ³	37 ³	2.1 ³	21.1 ⁴	38.8 ⁴	12.8 ³	2.1 ³	0
MEAN	— 2	42	2.6	20.5	39.4	13.8	2.1	2

¹ See Page 2 for an explanation of notations used.

² The check variety, *Dorman*, matured, on the average, October 11.

³ Adjusted to mean of *Dorman* for the period of evaluation 1952-'56.

⁴ Adjusted to mean of *Dorman* for the period of evaluation 1954-'56.

Table 10. Yield performance (bushels per acre) of soybean varieties evaluated in U. S. Regional Soybean Uniform Group VI Tests, Maryland, 1953, 1956-60.

Variety	Years and locations of tests								Mean 1953-58
	1953			Linkwood					
	Upper Marl- boro	Trappe	Snow Hill	1956	1957	1958	1959	1960	
<i>Lee</i>	28.9	34.8	34.5	34.3	26.8	30.5	33.7	42.3	31.2
Hood	28.4	35.0	31.8	34.6	29.3	32.7	41.1	37.6	32.2
Ogden	25.8	35.0	34.8	37.3	29.4	32.4	—	—	32.9
MEAN	27.7	34.9	33.7	35.4	28.5	31.9	37.4	40.0	32.1
L.S.D. _{.05}	4.0	N.S.	4.9	3.9	5.2	4.4	4.6	5.4	
L.S.D. _{.01}	5.4	N.S.	6.5	5.4	7.1	5.9	6.2	7.3	
C.V. (%)	10.5	9.5	9.7	7.0	10.4	7.4	6.9	8.0	

Table 11. Agronomic performance of soybean varieties evaluated in U. S. Regional Soybean Uniform Group VI Tests, Maryland, 1953-58.

Variety	Maturity ¹	Height	Lodging	Seed size	Seed quality	Purple stain
<i>Lee</i>	+ 1	41	3.0	13.1	1.8	0
Hood	— 6	40	3.1	16.0	1.8	0
<i>Ogden</i> ²	0	42	2.2	16.2	2.0	0
MEAN	— 2	41	2.8	15.1	1.9	0

¹ See Page 2 for an explanation of notations used.

² The check variety, *Ogden*, matured, on the average, October 27.

Table 12. Yield performance (bushels per acre) of soybean varieties evaluated in Maryland Soybean Variety Tests, Maryland, 1954-60.

Variety	Years and locations of tests												Means	
	1954		1955				1956		Linkwood				1954 to 1955	1956 to 1960
	Upper Marl- boro	Trappe	Upper Marl- boro	Kent County	Trappe	Prin- cess Anne	Upper Marl- boro	Kent County	1957	1958	1959	1960		
Clark	20.1	23.3	40.6	36.5	35.6	29.8	21.0	35.5	26.1	39.8	35.8	40.4	28.6	34.1
Wabash	24.7	24.1	33.2	37.4	32.3	24.0	24.5	35.6	25.9	38.4	35.4	42.2	28.0	34.4
Perry	27.8	26.0	39.0	45.5	35.0	24.6	25.9	39.0	26.4	41.6	40.3	40.1	31.4	36.2
S100	15.0	22.2	39.2	35.2	29.2	24.6	27.0	36.0	30.1	35.1	36.9	37.3	25.4	34.2
<i>Dorman</i> ¹	15.5	22.2	37.6	38.6	37.5	27.5	25.8	31.8	35.7	41.4	37.8	44.1	27.0	37.6
Luthy	12.3	23.0	35.5	36.2	28.0	23.8	29.8	32.2	35.8	35.2	34.6	40.4	24.3	35.4
Dortchsoy 67	16.0	22.8	34.7	36.8	33.4	24.0	27.1	34.0	34.7	41.4	40.6	37.8	25.7	37.0
Ogden	9.8	19.8	36.7	32.4	33.9	28.0	29.6	31.5	37.7	38.4	41.0	42.3	23.8	38.0
Lee	11.9	20.7	38.2	37.6	33.4	30.6	30.6	31.2	30.8	36.2	35.3	42.3	25.6	35.1
Early Wood's Yellow	11.4	20.1	29.2	30.7	29.1	26.8	24.9	26.2	37.0	37.1	—	—	22.3	—
Hawkeye	19.9	18.8	18.6	26.3	33.8	24.7	—	—	—	—	—	—	22.6	—
Korean	17.4	13.8	31.1	33.7	32.6	21.5	—	—	—	—	—	—	22.6	—
Bavender Special	16.2	18.8	28.2	29.8	37.2	18.8	—	—	—	—	—	—	23.0	—
Adams	18.4	16.4	24.0	25.5	32.4	20.6	—	—	—	—	—	—	21.5	—
Lincoln	19.0	21.4	34.2	35.2	32.6	21.7	—	—	—	—	—	—	25.6	—
Chief	21.4	23.0	37.7	31.0	32.6	21.0	—	—	—	—	—	—	26.4	—
Early Wood's Yellow No. 6	13.6	21.8	31.9	32.9	32.4	27.4	—	—	—	—	—	—	24.4	—
E.W.Y. No. 10	8.3	11.6	23.8	26.0	28.6	26.4	—	—	—	—	—	—	18.0	—
Wilson	16.2	18.8	26.9	32.0	20.4	23.0	—	—	—	—	—	—	20.3	—
Wood's Yellow	2.8	8.8	—	—	—	—	—	—	—	—	—	—	—	—
Wood's Yellow No. 9	1.8	5.4	—	—	—	—	—	—	—	—	—	—	—	—
Kent	—	—	43.2	42.2	40.6	25.9	24.7	37.8	33.8	40.2	40.1	46.5	—	38.4
Extra Early Wood's Yellow	—	—	—	—	—	—	20.4	33.0	24.8	33.2	—	—	—	—
Hood	—	—	—	—	—	—	28.2	30.8	29.8	34.6	38.9	37.6	—	34.1
Scott	—	—	—	—	—	—	24.4	35.9	32.2	37.6	41.2	43.2	—	36.9
Hill	—	—	—	—	—	—	31.5	33.2	35.6	38.6	37.4	37.0	—	36.2
MEAN	15.2	19.2	33.2	34.1	32.5	24.7	26.4	33.6	31.8	37.9	38.1	40.9	24.6	36.0
L.S.D. _{.05}	7.5	6.0	6.7	8.7	7.5	6.6	3.5	3.2	2.5	4.1	3.4	5.5	—	—
L.S.D. _{.01}	10.2	8.2	9.1	11.8	10.6	9.0	4.7	4.3	3.4	5.5	4.5	7.5	—	—
C.V. (%)	23.7	15.3	9.6	12.2	11.4	12.7	9.4	7.0	5.5	7.7	6.2	7.1	—	—

¹ Check variety.

Table 13. Agronomic performance of soybean varieties evaluated in Maryland Soybean Variety Tests, Maryland, 1954-60.

Variety	Character evaluated and years of evaluation									
	Maturity ¹		Height		Lodging		Seed size		Seed quality	
	1954 to '55	1956 to '60	1954 to '55	1956 to '60	1954 to '55	1956 to '60	1955 to '60	1957 to '60	1954 to '55	1956 to '60
Clark	24	21	34	39	1.8	2.5	18.2	20.6	2.2	3.3
Wabash	24	24	39	43	2.0	2.5	17.1	17.7	2.2	2.7
Perry	32	31	39	41	1.6	2.5	19.4	19.9	3.2	3.2
S100	38	36	46	47	2.3	2.6	17.2	17.8	3.0	3.1
<i>Dorman</i> ²	41	42	42	42	3.7	3.8	15.1	17.0	1.8	1.9
Luthy	46	49	40	40	3.6	3.9	19.9	20.6	2.3	2.6
Dortchsoy 67	44	42	38	39	2.4	3.6	13.4	15.5	1.8	2.4
Ogden	53	50	40	42	2.2	3.0	17.3	18.2	2.4	2.3
Lee	56	56	40	40	2.9	3.4	15.7	14.8	1.4	2.1
Early Wood's Yellow	48		38		3.2		16.1		1.4	2
Hawkeye	12		31		1.6		17.3		3.6	17
Korean	18		30		2.2		20.3		4.2	28
Bavender Special	16		32		2.8		15.9		4.0	16
Adams	14		30		1.9		15.0		3.1	28
Lincoln	18		33		2.1		15.9		3.5	13
Chief	24		42		3.2		15.1		3.0	26
Early Wood's Yellow No. 6	48		38		3.1		16.9		1.1	5
Early Wood's Yellow No. 10			42		2.8		23.5		2.4	0
Wilson	37		49		3.3		13.4		2.6	0
Wood's Yellow										
Wood's Yellow No. 9										
Kent		30		41		2.0	19.3	21.3	3.3	7
Extra Early Wood's Yellow										
Hood		50		40		3.4		16.7	2.3	1
Scott		34		42		2.6		17.0	3.2	4
Hill		39		39		3.6		14.6	2.2	1
MEAN	33	39	38	41	2.6	3.0	17.1	17.8	2.6	2.7
									11	3

¹ Maturity is here expressed as days after August 31. See Page 2 for an explanation of notations used.² Check variety.